

REMARKS

Claims 1-3 stand rejected under 35 U.S.C. § 112, second paragraph. This rejection is respectfully traversed for the following reasons.

The Examiner alleges that claim 1, due to the word “including,” is unclear as to whether the “resist film is made from a hydroscopic compound or as indicated in applicant’s specification (Page 3) that the compound is formed ‘onto the surface of ... resist’.” As a preliminary matter, it is respectfully submitted that claim 1 is definite standing by itself, whereby Applicants’ specification simply describes exemplary embodiments of the claims but is non-limiting. Accordingly, the phrase in claim 1 reciting “forming a resist film made from a resist material including a material of absorbing moisture” means that the resist film can include a material of absorbing moisture, but can also include other materials.

Claim 1 is not limited by a particular construction of the one or more materials, layers, etc., making up the *collective* resist film so as to embody, when for example multiple materials make up the resist film, a multi-layer construction or an integrally formed construction. In this regard, as set forth in MPEP § 2173.04, claim breadth is not indefiniteness. In any event, the portion of Applicants’ specification on page 3 thereof referenced by the Examiner simply details one exemplary embodiment of the resist film in which the resist film includes material of absorbing moisture as part of an upper portion of the resist film.

Based on the foregoing, it is respectfully submitted that claims 1-3 is definite. Accordingly, it is respectfully requested that the 35 U.S.C. § 112, second paragraph rejection be withdrawn.

Claims 1-3 stand rejected under 35 U.S.C. § 102 as being anticipated by Sugeta et al. '365 ("Sugeta"). Claim 1 is independent. This rejection is respectfully traversed for the following reasons.

As a preliminary matter, it is noted that the filing date of Applicants' priority document precedes the effective filing date of Sugeta. Nonetheless, it is respectfully submitted that Sugeta does not disclose or suggest the combination of features recited in claim 1.

Claim 1 recites in pertinent part, "forming a resist film made from a resist material including a material of *absorbing moisture*; performing pattern exposure by selectively irradiating said resist film with exposing light *while* supplying immersion solution onto said resist film; and forming a resist pattern by developing said resist film *after* the pattern exposure" (emphasis added). The Examiner has apparently relied on the disclosed hydrophilic treatment of Sugeta as being relevant to the present invention. However, as expressly disclosed at paragraph [0020] of Sugeta, a "substrate having *photoresist patterns (mask patterns) thereon* is subjected to a hydrophilic treatment," and the alleged absorbing material ("ethylene glycol") and immersion solution of Sugeta form part of the hydrophilic solvent (*see* paragraph [0021]). It is the photoresist pattern that is subject to the hydrophilic treatment, so that the hydrophilic treatment does NOT take part in the photoresist pattern *formation process*.

Indeed, Sugeta merely discloses the conventional resist forming, resist patterning, and developing steps in paragraph [0017] for forming a photoresist pattern. Accordingly, Sugeta does not disclose performing pattern exposure by selectively irradiating the resist film with exposing light *while* supplying the alleged immersion solution onto the resist film. Rather, the alleged immersion solution of Sugeta is supplied to the completed photoresist pattern after pattern exposure and development has been performed. It follows that Sugeta further does not

disclose forming a *resist film* made from a resist material including a material of *absorbing moisture*, which resist film is selectively irradiated with exposing light. Rather, the resist film which is irradiated with light in Sugeta is simply a conventional resist film (*see* paragraph [0017]) not including a material of absorbing moisture. The light-exposed resist film of Sugeta is then developed to form the photoresist pattern, and it is the photoresist pattern subjected to the hydrophilic treatment rather than the alleged resist film.

The aforementioned differences between claim 1 and Sugeta is emphasized by the completely different purposes of the present invention and Sugeta. That is, Sugeta is directed to preventing thermal shrinkage of the photoresist patterns, whereas the present application aims to provide the capability to prevent immersion solution used in the pattern exposure process from evaporating. Indeed, as described in paragraph [0017], the pattern exposure process of Sugeta does not use an immersion solution and the resist film of Sugeta is conventional (i.e., no absorbing moisture material).

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that Sugeta does not anticipate claim 1, nor any claim dependent thereon.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set

forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination. In this regard, it is respectfully requested that withdrawn dependent claims 4-5 be rejoined as being dependent on an allowable claim.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 102 be withdrawn.

CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,
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